

Patent Abstracts of Japan

PUBLICATION NUMBER : 08023642
PUBLICATION DATE : 23-01-96

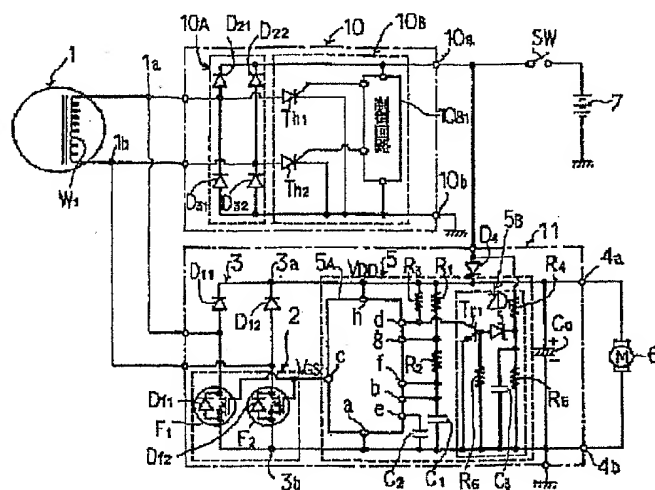
APPLICATION DATE : 05-07-94
APPLICATION NUMBER : 06153933

APPLICANT : KOKUSAN DENKI CO LTD;

INVENTOR : ENDO TOKIAKI;

INT.CL. : H02J 7/16 H02M 7/06 H02P 9/30

TITLE : POWER UNIT FOR INTERNAL COMBUSTION ENGINE



ABSTRACT : PURPOSE: To provide a power unit for internal combustion engine which can supply DC power to a load even when the rotating speed of an internal combustion engine is extremely low.

CONSTITUTION: A power unit for internal combustion engine is provided with a rectifying power source section 10 with a voltage regulator which is supplied with electric power from a permanent-magnet generator 1, switch circuit 2 which uses MOSFETs F1 and F2 as switching elements and short-circuits the output terminals of the generator 1 to each other, and FET control circuit 5 which repeatedly turns on the MOSFETs F1 and F2 when the output voltage of the power source section 10 is equal to or lower than a set value or maintains the MOSFETs at turned-off states when the output voltage exceeds the set value. By turning on/off the MOSFETs, the output voltage of the generator 1 is boosted so as to secure the voltage required to drive a load when an internal combustion engine is operated at a low speed. In addition, the loss caused by the switching of the MOSFETs is reduced by turning on/off the MOSFETs only when the engine is operated at a low speed.

COPYRIGHT: (C)1996,JPO